

Rainfall in India

The southwest monsoon and the northeast monsoon are the two major types of Rainfall in India. About 75% of Average Rainfall in India falls during the southwest monsoon, often known as the "long rains," which span from June to September. The northeast monsoon, often known as the "brief rains," which occurs from October through December, contributes the remaining 25% of the total rainfall in India.

Southwest Monsoon

- The interaction of two air masses- the warm, humid air mass over the Indian Ocean and the colder, dry air mass over Central Asia, leads to the southwest monsoon.
- Because of this interaction, a low-pressure area forms across the Indian subcontinent, which shifts the direction of the winds from the ocean to the land.

Northeast Monsoon

- On the other hand, the northeast monsoon is brought on by the interplay of the warm Bay of Bengal air mass with the cold Siberian air mass.
- As a result, Siberia experiences a high-pressure area, which makes the winds blow from the land towards the ocean. Depending on the region, India has a wide range of rainfall.
- The eastern coast, which includes locations like Kolkata and Odisha, receives considerably less rainfall than the western coast, which includes regions like Mumbai and Kerala.
- With more than 2000 mm of precipitation annually, the northeastern states, including Assam and Meghalaya- are the wettest in the nation.

Distribution of Average Annual Rainfall

The Rainfall in India in 2022 was recorded 92.5cm at the end of monsoon season. The distribution of rainfall in India are as follows:

- **Extremely Heavy Precipitation regions:** These are the areas that receive more than 400 cm of rainfall annually. West Bengal, Odisha, Assam, Meghalaya, and Arunachal Pradesh are among them.
- **Very Heavy Precipitation regions:** These are the areas that receive more over 250 cm of precipitation annually. These include Lakshadweep, Kerala, Tamil Nadu, and coastal Karnataka.
- **Heavy Precipitation regions:** These are the areas that receive more than 200 cm of rainfall annually. These comprise Meghalaya, Arunachal Pradesh, Mizoram, Nagaland, Manipur, Tripura, Sikkim, and Assam in addition to the Andaman and Nicobar Islands.
- **The Himalayan region:** More than 200 cm of rainfall in this area each year. Parts of Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh are included in this.
- **Desert and Semi-desert regions:** These are the areas that receive less than 50 cm of rainfall annually. These include Jammu and Kashmir, Rajasthan, Gujarat, and areas of Punjab and Haryana.

- **Coastal regions:** These are the areas that get more than 100 cm of rain each year. These include Tamil Nadu, Kerala, Karnataka, and Andhra Pradesh.
- **Inland regions:** These are the areas that get more than 150 cm of rain each year. These include Madhya Pradesh, Jharkhand, Chhattisgarh, and Maharashtra.

Average Rainfall in India

Every year, the Average Rainfall in India is around 125 cm of rain (890 mm). Due to the country's very varied geography, including relief or topography, distance from the sea, etc., there is a significant variance in the amount of rainfall it receives each year.

